

Remarks/Arguments

Applicant's representative wishes to thank Examiner Colbert for the time spent discussing the pending non-final rejection on August 16, 2006, for informally reviewing Applicant's proposed Amendments and Remarks submitted by facsimile on August 17, 2006, and for discussing with Applicant's representative alternate language for distinguishing the claims submitted herewith over the cited art.

Claims 18, 19, 21-26, and 28-31 were pending in the instant application. This response cancels Claims 25-26 without prejudice and provides amendments to each of Claims 18, 19, 21-24 and 28-31. It follows then that Claims 18, 19, 21-24 and 28-31 are currently pending.

It should be noted that while each of the submitted claims is amended, Applicant respectfully asserts that the amendments provided to such claims serve only to clarify what was previously recited and do not add any additional limitations not explicitly or impliedly present in such claims prior to their amendment. Further, Applicant asserts that none of such amendments introduce new matter into the instant application.

Rejection under 35 U.S.C. §102

Claims 18, 19, 21-26, and 28-31 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,610,593 to Kohl et al. (hereinafter "Kohl"). Claims 25 and 26 are canceled making their rejection moot. Applicant traverses the rejection as it is applied to the pending claims.

The rejection alleges that regarding Claims 18 and 23, that Kohl, referring to Figures 7A-H thereof, teaches a method of fabricating a

microstructure comprising providing a substrate having a sacrificial polymer layer (140) disposed thereon, disposing a framing material (144) onto at least a portion of the sacrificial polymer layer, disposing an overcoat layer (146) onto the framing material, wherein the overcoat layer is selected from polynorbornenes, epoxides, polyarylenes, ethers parylenes and combinations thereof, and wherein the framing material substantially separates the sacrificial layer from the overcoat layer and covers portions of the sacrificial layer that would otherwise contact the overcoat layer, and removing the sacrificial layer by thermal decomposition to form an air region within the area defined by the sacrificial material. Applicant disagrees with this interpretation of Kohl.

While it is true that during the examination of an application, an Examiner is charged with reading the language of a claim in the broadest possible manner, Applicant respectfully asserts that the Examiner's reading of Kohl is overly broad and does not take into consideration the teaching of Kohl that the material of layer (146) in Kohl Fig. 7D is "a solid non-sacrificial material" and therefore CANNOT serve the function of an overcoat layer as defined in the instant application.

Such is readily apparent from the recitation of, for example, Applicant's Claim 23 before applying the current amendments; specifically such claim recited "providing ... a sacrificial polymer layer in an area within the overcoat layer" and "removing the sacrificial polymer layer via thermal decomposition to form an air-region". Certainly any assertion that layer (146) of Kohl anticipates the overcoat layer of the instant application cannot be maintained when the thermal decomposition process claimed would remove such a layer and make it impossible to form the claimed air-regions. Applicant further asserts that as pre-amended Claim 18 also recited "removing the sacrificial polymer via thermal decomposition" fabrication of the claimed "microstructure" would also be impossible.

Further, the actual teaching of Kohl, states that material (146) is a "second solid layer of a sacrificial material" (see, Kohl at col. 21, line 49 through col. 22, line 44). As both Kohl and the present invention teach that air gap structures (Kohl), or air-regions as they are referred to in the instant application, are formed by the removal of a sacrificial material disposed within a non-sacrificial material (layer (144) in Kohl and overcoat layer (14) and framing material layer (16) in the instant application), the Examiner's assertion that material (146) of Kohl is representative of the framing material layer of the instant invention IS NOT POSSIBLE and therefore overbroad (see, materials (16) and (14) in Fig.1 of the instant application which a structure having air-regions (18) and compare to Fig. 7G of Kohl where material (146) has been thermally decomposed to form air gaps (152)). Therefore, Applicant respectfully asserts that the rejection of pending independent Claims 18 and 23, as well as Claims 19, 21-22, 24, and 28-31 which depend therefrom, under §102 citing Kohl, is improper and must be withdrawn.

Not withstanding the above, and in an effort to expedite the prosecution of the instant application, Applicant has provided amended independent Claims 18 and 23 that make the distinction between the structures of Kohl and those of the present application as apparent in words as they are the figures of each are compared (see, Kohl, Figs. 7A-7H; as compared to Figs. 1, 4A-4D, 5A and 5B of the instant application.) Specifically, Applicant has amended Claim 18 to call-out the overcoat layer as "a non-sacrificial overcoat layer", and Claim 23 to call-out that "the inside of said framing material layer engages each air-region and the outside of said framing material layer engages the overcoat layer". Applicant believes, as stated above, that this additional language provides only additional clarity rather then limitation. To that effect, the amended claims of the current paper are provided to the Examiner for

entry if it is found that Applicant's argument with respect to Kohl, presented above, is not persuasive and the rejection not withdrawn.

It should be noted that Applicant has reviewed the previous rejections raised during the prosecution of the instant application to Matzke et al., and to Babich et al. and asserts that the current amendments do nothing to re-establish either reference as anticipatory or obviousness-type prior art.

Applicant respectfully requests the Examiner's reconsideration of the current rejection based upon the arguments presented herein with respect to independent Claims 18 and 23 and if such arguments are found persuasive, the withdrawal of the current rejection for such independent claims as well as those claims that depend therefrom. If however, the Examiner believes the aforementioned argument not persuasive, Applicant requests entry of the amended claims provided and reconsideration of the §102 rejection based on Kohl in view of such amended claims.

If the Examiner's next action is anything other than a Notice of Allowance, Applicant requests the Examiner contact the undersigned telephonically at 440-922-1469 during normal business hours, East Coast Time, to schedule an interview.

Respectfully submitted,

Dated: 18 Aug. 2006

By: 
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